Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

1 to 25. (Canceled)

26. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising:

providing a composite scaffold with a porous ~~ceramic phase including a~~ discrete ceramic layer, a porous ~~polymer phase including a~~ discrete polymer layer, and an interface region attaching the discrete ceramic layer to the discrete polymer layer, ~~the polymer phase attached to the ceramic phase at an interphase region~~ where in the interface region, a portion of the polymer ~~phase~~ layer is at least partially infused into a portion of the ceramic ~~phase~~ layer mechanically interlocking the ceramic and polymer ~~phases~~ layers, ~~with the porosity of the ceramic and polymer phases communicating,~~ the ~~interphase~~ interface region being situated between the discrete ceramic layer ~~of the porous ceramic phase~~ and the discrete polymer layer ~~of the porous polymer phase~~;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of articular cartilage; and

placing and securing the scaffold in the receptacle space with the ceramic ~~phase~~ layer adjacent to the bony tissue and the polymer ~~phase~~ layer adjacent to the cartilaginous tissue.

27. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising:

providing a composite scaffold with a porous ~~ceramic phase including a~~ discrete ceramic layer, a porous ~~polymer phase including a~~ discrete polymer layer, and an interface region attaching the discrete ceramic layer to the discrete polymer layer, ~~the polymer phase attached to the ceramic phase at an interphase region~~ where in the interface region, a portion of the polymer ~~phase~~ layer is at least partially infused into a portion of the ceramic ~~phase~~ layer mechanically interlocking the ceramic and polymer ~~phases~~ layers, ~~with the porosity of the ceramic and polymer phases communicating,~~ the ~~interphase~~ interface region being situated between the discrete ceramic layer ~~of the porous ceramic phase~~ and the discrete polymer layer ~~of the porous polymer phase~~;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of a spinal disc; and

placing and securing the scaffold in the receptacle space with the ceramic ~~phase~~ layer adjacent to the bony tissue and the polymer ~~phase~~ layer adjacent to the cartilaginous tissue.

28. (Currently Amended) A method for repairing a defect area at the gradient junction of cartilaginous tissue and bony tissue, comprising:

providing a composite scaffold with a porous ~~ceramic phase including a~~ discrete ceramic layer, a porous ~~polymer phase including a~~ discrete polymer layer, and an interface region attaching the discrete ceramic layer to the discrete polymer layer, ~~the polymer phase attached to the ceramic phase at an interphase region~~ where in the interface region, a portion of the polymer ~~phase~~ layer is at least partially infused into a

portion of the ceramic ~~phase~~ layer mechanically interlocking the ceramic and polymer ~~phases~~ layers, ~~with the porosity of the ceramic and polymer phases communicating,~~ the ~~interphase~~ interface region being situated between the discrete ceramic layer ~~of the porous ceramic phase~~ and the discrete polymer layer ~~of the porous polymer phase~~;

boring a receptacle space in the gradient junction at the site of the injury to receive the scaffold, the gradient junction being that of the meniscus; and

placing and securing the scaffold in the receptacle space with the ceramic ~~phase~~ layer adjacent to the bony tissue and the polymer ~~phase~~ layer adjacent to the cartilaginous tissue.

29. (Currently Amended) The method of Claim 26, wherein the polymer ~~phase~~ layer comprises a polymer foam.

30. (Currently Amended) The method of Claim 26, wherein the polymer ~~phase~~ layer is made from foaming by lyophilization.

31. (Currently Amended) The method of Claim 27, wherein the polymer ~~phase~~ layer is made from foaming by lyophilization.

32. (Currently Amended) The method of Claim 28, wherein the polymer ~~phase~~ layer is made from foaming by lyophilization.

33. (Currently Amended) The method of Claim 26, wherein the discrete ceramic layer ~~of the porous ceramic phase~~ is positioned on the top of the ~~interphase~~ interface region,

and wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on the bottom of the ~~interphase~~ interface region.

34. (Currently Amended) The method of Claim 33, wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on only one side of the ~~interphase~~ interface region.

35. (Currently Amended) The method of Claim 27, wherein the discrete ceramic layer ~~of the porous ceramic phase~~ is positioned on the top of the ~~interphase~~ interface region, and wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on the bottom of the ~~interphase~~ interface region.

36. (Currently Amended) The method of Claim 35, wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on only one side of the ~~interphase~~ interface region.

37. (Currently Amended) The method of Claim 28, wherein the discrete ceramic layer ~~of the porous ceramic phase~~ is positioned on the top of the ~~interphase~~ interface region, and wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on the bottom of the ~~interphase~~ interface region.

38. (Currently Amended) The method of Claim 37, wherein the discrete polymer layer ~~of the porous polymer phase~~ is positioned on only one side of the ~~interphase~~ interface region.

39. (Currently Amended) The method of Claim 26, wherein the porous ceramic ~~phase~~ layer has a first plurality of pores, the porous polymer ~~phase~~ layer has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

40. (Currently Amended) The method of Claim 27, wherein the porous ceramic ~~phase~~ layer has a first plurality of pores, the porous polymer ~~phase~~ layer has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

41. (Currently Amended) The method of Claim 28, wherein the porous ceramic ~~phase~~ layer has a first plurality of pores, the porous polymer ~~phase~~ layer has a second plurality of pores, the first plurality of pores being larger than the second plurality of pores.

42. (Currently Amended) The method of Claim 26, wherein the ~~interphase~~ interface region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the porous polymer ~~phase~~ layer, the polymer ~~phase~~ layer interlocking with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.

43. (Currently Amended) The method of Claim 27, wherein the ~~interphase~~ interface region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the porous polymer ~~phase~~ layer, the polymer ~~phase~~ layer interlocking

with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.

44. (Currently Amended) The method of Claim 28, wherein the ~~interphase~~ interface region is formed by permitting a polymer solution to at least partially infuse into pores of a porous ceramic body, and foaming the polymer solution to produce a polymer foam thereby forming the porous polymer ~~phase~~ layer, the polymer ~~phase~~ layer interlocking with the ceramic body where the polymer solution was permitted to infuse into the ceramic body.

45. (New) The method of Claim 26, wherein the interface region exhibits a gradual transition between the ceramic and polymer layers.